

REMARKS

Status of the Claims

Claims 1-3, 6-11, 14-18, 21-25, 29-37, 40, 45-47, and 50-51 remain pending in the present application.

In the present Office Action, the Examiner acknowledged receipt of the priority application.

In the present Office Action, the drawings submitted on February 14, 2011, were not approved. The Examiner asserted that the addition of a reference number and leader to indicate the second bead seat illustrated in Figures 15 and 16 added new matter to the specification. The Examiner asserted that reference character 1 indicated a flange rather than the gutter.

In the present Office Action, the specification of the application was objected to, as the Examiner argues that the term “gutter” should be replaced by the term “projection” or “flange”.

In the present Office Action, the Examiner objected to the Amendment filed on February 14, 2011 as introducing new matter, in particular the addition of a reference number and leader to the structure shown in the figures illustrating the second bead seat.

In the present Office Action, the claims of the present application were objected to, to wit, that the term “taper” in claim 14 should be “tapered”, and that a period was missing from the end of claim 36.

In the present Office Action, claims 1, 14, 29, 40, and 45 were rejected under 35 U.S.C. § 112, Para. 1, for including new matter.

In the present Office Action, claims 16, 29-37, 40, 47, and 51 were rejected under 35 U.S.C. § 112, Para. 2, for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner maintained his assertion that the term “gutter” was indefinite.

In the present Office Action, claims 40 and 51 were rejected under 35 U.S.C. § 112, Para. 2, for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner raised an assertion that the term “flat” was indefinite.

In the present Office Action, claims 1-3, 6-9, 11-18, 21-23, 25, 29-37, 40, 45-47, and 50-51 were rejected under 35 U.S.C. § 103(a) as being obvious over Jurus in view of Ashley et. al.

In the present Office Action, claims 10 and 24 were rejected under 35 U.S.C. § 103(a) as being obvious over Jurus in view of Beyer and further in view of Ashley, Jr.

In the present Office Action, claims 1-51 were provisionally rejected on the ground of obviousness-type double patenting as being unpatentable over claims 1-51 of copending application 10/585,468.

Argument

1.0 Rejections Under 35 U.S.C. § 103

1.1 The Present Application

Claims 1-3, 6-11, 14-18, 21-25, 29-37, 40, 45-47, and 50-51 are presently pending in the present application, titled Wheels of Single Component Construction and Method of Making, which is directed towards a method of manufacturing a unitary steel wheel having a 5° taper bead seat, equipment required therefore, and the resultant improved wheel.

Applicant notes with appreciation the withdrawal of the rejection under 35 U.S.C. §102 of claims 1-4, 6-9, 11-19, 21-23, 25-28, 30-39, 45-48, and 50-51 as anticipated by Jurus '810.

Applicant notes with appreciation the withdrawal of the rejection under 35 U.S.C. §102(e) of claims 1-51 as anticipated by Srivathsan.

1.2 The Examiner's Response to Applicant's Arguments

In the present Office Action, the Examiner disregarded Applicant's previous comments, by making the conclusory statement that a wheel formed from multiple components was somehow a substantially unitary wheel. "Namely, the wheel of Jurus is formed of a major component and a minor component, which when fully assembled form a "substantially unitary wheel." Final Office Action, at pgs. 10-11.

The Examiner's position that Jurus '810 is a unitary wheel is contradicted by the specification of the present application which clearly provides the meaning of the term "unitary" as used in the application. In particular, the specification of the patent identifies the meaning of a unitary wheel: "Thus, a unitary (also referred herein as "one-piece") wheel construction which comprises rim and disc portions formed from the substantially contiguous single or unitary piece of substrate material, such as steel . . ." Specification, Para. 0008. Claim 1 clearly requires that the wheel be of unitary construction ("wherein said wheel is of substantially unitary construction"), and to make clear that the wheel of the present invention comprises the entire wheel, the unitary piece is required not only to include the disc portion and the rim portion, but that both bead seats be formed on the unitary rim portion. The remaining independent claims further include the limitation that the wheel be of unitary construction, and include both bead seats.

Nowhere does Jurus '810 refer to the wheel claimed in that invention as a "unitary wheel." Indeed, as quoted above, the Examiner concedes that the wheel of Jurus '810 is a two part wheel, made of a major portion, comprising the wheel disc and part of the outer rim, with that portion of the outer rim formed from the major portion having one bead seat thereon, and a minor portion, forming the remaining part of the outer rim and having the second bead seat formed thereon.

The Examiner further seeks to denigrate Applicant's comments by asserting that Jurus does show a wheel having two bead seats. The fact that the assembled wheel of Jurus has two bead seats is not disputed. What is disputed, however, is that both bead seats, and the disc portion, are part of a unitary wheel. It is clear that Jurus forms a first bead seat on a major portion of the wheel, and a second bead seat on a second portion of the wheel, and that the wheel of Jurus only discloses two bead seats when the two sub-assemblies are joined to each other. Jurus thus, does not disclose a unitary wheel, i.e., a wheel formed from a single piece of contiguous or unitary substrate.

1.3 Rejection of Claims 1-3, 6-9, 11-18, 21-23, 25, 29-37, 40, 45-47, and 50-51 under 35 U.S.C. § 103(a) over Jurus '810 in view of Ashley et. al.

In the present Office Action, the Examiner asserted that claims 1-3, 6-9, 11-18, 21-23, 25, 29-37, 40, 45-47, and 50-51 were obvious under 35 U.S.C. § 103(a) over Jurus '810 in view of Ashley. As discussed above, Jurus '810 does not disclose a unitary wheel, but rather a two piece wheel, and accordingly this limitation of claim 1 is neither taught nor suggested by Jurus '810. Nor does Jurus enable the creation of such a unitary wheel.

Ashley is also directed towards a two-piece wheel, with the rim being formed separately from the center disc. Accordingly, the unitary limitation of claim 1 is neither taught nor suggested by Ashley. Accordingly, as this limitation of claim 1 is neither taught nor suggested by either reference, the combination does not and can not render claim 1 obvious.

Claims 14, 29, 40, and 45 are the other independent claims of the present application. Each of the other independent claims also requires the vehicle wheels of the present invention to be of unitary construction, as that term is used in the specification of the patent. Accordingly, as neither Jurus '810 nor Ashley teach or suggest unitary wheels in accordance with the present invention, the combination of Jurus '810 and Ashley does not and can not render these claims obvious. Furthermore, since each of the remaining claims asserted to be obvious depend from

one of these independent claims, and thus incorporate the unitary limitation, the remaining claims can not be obvious over the combination of Jurus '810 and Ashley, either.

1.4 Rejection of Claims 10 and 24 under 35 U.S.C. § 103(a) over Jurus '810 in view of Ashley et. al. and Beyer

In the present Office Action, claims 10 and 24 were rejected under 35 U.S.C. § 103(a) as being obvious over Jurus in view of Ashley and further in view of Beyer. As discussed previously, Beyer U.S. Pat. No. 4,528,734 is the most relevant reference¹, although it does not disclose the formation of a unitary wheel through spin forming, but rather uses a forged preform having the basic shape of the finished wheel. Thus Beyer does not disclose the use of spin-forming the center disc and outer rim from a unitary substrate to form a unitary wheel. Accordingly, the addition of Beyer to Jurus '810 and Ashley does not correct the absent disclosure of Jurus '810 and Ashley, and thus the addition of Beyer to Jurus '810 and Ashley does not render obvious any claim of the present invention.

2.0 Rejections Under 35 U.S.C. § 112

2.1 The Second Bead Seat as New Matter

In the present Office Action, the Examiner asserts that claims 1, 14, 29, 40, and 45 fail to comply with the written description requirement, since in the Examiner's mind, one skilled in the relevant art would not understand the presence of first and second bead seats in the original disclosure, and thus the inclusion of a reference arrow and numeral identifying the second bead seat as shown in original Figure 15 created new matter, notwithstanding that the identified structure was included in the original specification.

The present invention is directed towards a vehicle wheel for use with both tires using inner tubes, and tube less tires. Such tires are very well known in the industry, and include a first bead on the inner wall of the tire and a second bead on the outer wall of the tire. The present invention is directed towards a specific type of wheel, i.e., one in which one of the seats for receiving the inner or outer beads is of a particular type, i.e., a 5 degree taper, and this limitation is included in each of the claims of the present application.

¹ Jurus '609 likewise teaches a unitary wheel, but also relies on the substrate first being stamped or forged to form the pre-form into a shape which can be further formed using spinning techniques to create a complete wheel.

Figures 15 and 16, showing the completed profile of the outer rim, clearly conveys to a person of ordinary skill in the art not only a 5 degree taper bead seat, but the presence of a second bead seat for receiving the second bead. As no particular style of bead seat is required for the present invention, no discussion of particular types was made, since persons of ordinary skill in the art are fully aware of the making and use of various bead seats. Thus, the inclusion of the second bead seat in Figure 15 conveyed to a person of ordinary skill in the art the presence of the second bead seat, and the rejection under 35 U.S.C. §112 as disclosing new matter for simply adding the requested reference number to add nomenclature to previously disclosed structure is traversed.

2.2 The Purported Indefiniteness of the Term “Gutter”

In the present Office Action, the Examiner maintained the rejection of claims 16, 29-37, 40, 47, and 51 as containing the purportedly indefinite term “gutter”. As noted previously, and which the Examiner does not dispute, the meaning of the term “gutter” is commonly understood in the art to mean a channel at the base of a bead seat to prevent a tire from displacing from the bead seat. While the Examiner apparently believes the term can refer only to the absence of area having material at the bottom of the gutter, Applicant believes the term refers to both the area of absent material, as well as the structure used to bound that area of the absence of material.

To Applicant’s best understanding, the Examiner objected to the use of the term as a result of the reference arrow in Figure 16 pointing to a raised portion which forms the sidewall of the gutter, rather than to the bottom of the channel formed by recess inherent to the presence of the raised portion. While disagreeing with the Examiner’s contention that a person of ordinary skill in the art would not understand the term, or that a person of ordinary skill in the art would understand Applicant to be seeking to redefine the term, Applicant previously adjusted the arrow in Figure 16 to particularly point to the base of the depression formed by the raised portion of the gutter, and thus believes that any confusion regarding Applicant’s intent to redefine the term to a definition other than commonly used in the field. Accordingly, Applicant believes that any foundation for the rejection has been clarified, and thus the rejection is traversed.

2.3 The Purported Indefiniteness of the Term “Flat”

In the Office Action, the Examiner has asserted the term “Flat” as used in claims 40 and 51 to be indefinite, as the specification does not provide a standard for ascertaining the “requisite

degree.” Applicant believes that the Examiner is misconstruing the term flat to be a geometrical specification, and thus that some degree of “flatness” is required to meet the claim.

In claims 40 and 51, the term “flat” is used as commonly understood in the art to refer to the style of the center section of the outer rim. In particular, the claims recite “of flat base or semi-drop center rims”, which identify two styles of outer rims, i.e., those having a drop center for receiving a first wall of a tire during assembly, and those rims that do not have a drop center (i.e., “flat base”). Accordingly, the term is used to reference particular styles of rims well known in the art, rather than the purported geometric requirement imposed by the Examiner.

Accordingly, when read and construed by a person of ordinary skill in the art, the use of the term flat base has a well known meaning which is not related to a particular level of geometric perfection, but rather to the center style of the rim itself, and the Examiner’s rejection is believed inapposite.

3.0 Correction of Drawings

In the previous Office Action, Figures 1-8 were objected to as not including the legend “Prior Art”, and as lacking reference characters. Figures 1-15 were objected to as lacking reference characters. The Figures were amended to address the Examiner’s concerns. A copy of those drawings as previously submitted is attached hereto as Exhibit A.

In the present Office Action, the Examiner again objected to the drawings, now asserting that the mere addition of a reference number and leader to structure present in the original figures gave rise to a new matter rejection. Applicant does not believe that the mere addition of a reference number and leader to structure already present in a Figure can be new matter, and accordingly traverses the objection. The structure was disclosed in both Figures 15 and 16 as originally filed, and thus no new matter has been added.

With respect to the Examiner’s confusion regarding the term “gutter”, as discussed above, Figure 16 was previously amended to move the leader for the reference to the gutter to the area of an absence of material, rather than the surrounding structure which bounds that area, as discussed above. The Examiner did not address this amendment, nor the effectiveness of the amendment in addressing the Examiner’s concerns, and accordingly Applicant believes that the prior amendment, as further expounded upon herein, overcomes the rejection regarding the leader line for the reference numeral associated with the gutter.

4.0 Correction of Informalities

In the present Office Action, claims 14 and 36 of the present application were objected to, to wit, that the term “taper” in claim 14 should be “tapered”, and that a period was missing from the end of claim 36.

With respect to claim 14, the term “taper” has been amended to read “tapered”.

With respect to claim 36, a missing period has been added.

5.0 Provisional Obviousness Type Double Patenting

In the present Office Action, the Examiner asserted a provisional rejection of claims 1-51 of the present invention.

Applicant does not agree that Applicant is claiming the same invention in both applications. While the inventions are clearly related, they are directed towards different products. Furthermore, as the scope of any claims to be allowed is unknown at this time, Applicant believes it premature to enter a terminal disclaimer in the absence of a comparison of allowable claims.

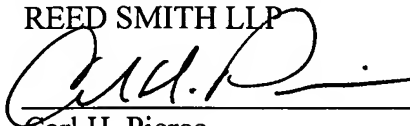
6.0 Conclusion

Based upon the above remarks, Applicant respectfully requests reconsideration and withdrawal of this restriction requirement and early allowance of the pending claims. Should the Examiner feel that a telephone conference with Applicant's attorney would expedite prosecution of this application, the Examiner is urged to contact the undersigned attorney.

Date: October 18, 2011

Respectfully submitted,

REED SMITH LLP

A handwritten signature in black ink, appearing to read 'C.H. Pierce', is written over a horizontal line.

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EXHIBIT A